REMARKS

This application has been reviewed in light of the Office Action dated July 6, 2004. Claims 1, 3-9, and 11-17 are presented for examination. Claims 1, 9, and 17, the independent claims, have been amended to define more clearly what Applicant regards as his invention. Favorable reconsideration is requested.

Claims 1, 3-6, 9, 11-14, and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,136,401 (*Yamamoto et al.*), in view of U.S. Patent No. 5,442,717 (*Murakami*), and Claims 7, 8, 15, and 16 were rejected under Section 103(a) as being unpatentable over *Yamamoto et al.* and *Murakami* in view of U.S. Patent No. 6,351,558 (*Kuwata*).

As shown above, Applicant has amended independent Claims 1, 9, and 17 in terms that more clearly define what he regards as his invention. Applicant submits that these amended independent claims, together with the remaining claims dependent thereon, are patentably distinct from the cited prior art for at least the following reasons.

The aspect of the present invention set forth in Claim 1 is an image processing apparatus. The apparatus includes a detector, a generator, and a corrector. The detector detects an image area contained in an inputted image having a frame image. The detected image area does not include the frame image of the inputted image. The generator generates correction information of the detected image area, and the corrector corrects the image area based on the generated correction information. The detector differentiates the frame image, which has gradation, of the inputted image from the detected image area by using a detection method that detects pixels by determining whether or not a pixel of interest and pixels adjacent to the pixel of interest have a same hue and a difference

between lightness and saturation having a predetermined value or less, and recognizes the frame image, which has the gradation, by detecting the upper, lower, left and right ends of the frame image from the detected pixels.

Among other important features of Claim 1 is that the detector differentiates the frame image, which has gradation, of the inputted image from the detected image area by using a detection method that detects pixels by determining whether or not a pixel of interest and pixels adjacent to the pixel of interest have a same hue and a difference between lightness and saturation having a predetermined value or less, and recognizes the frame image, which has the gradation, by detecting the upper, lower, left and right ends of the frame image from the detected pixels.

Yamamoto et al. relates to an image layout apparatus for performing a layout, e.g., coloring, a modification of a pattern, and the like, of an original image in accordance with mark image data designated by a color frame mark on the original image. The *Yamamoto et al.* apparatus includes a color frame discriminating circuit 5 (Figure 1) which detects a color frame mark on an original (column 10, lines 26-27). The *Yamamoto et al.* apparatus also includes an inner frame area detecting circuit 6 (Figure 1). Figure 9 of *Yamamoto et al.* depicts a block diagram of the inner frame area detecting circuit 6 and is discussed at column 11, lines 48-54. In the inner frame area detecting circuit 6 of *Yamamoto et al.*, an inner frame discriminating unit 91 independently detects the inner and outer portions of color frames of four colors, e.g., red, green, yellow and blue. An area color determining unit 92 determines the area colors in units of areas on the basis of the inner frame discrimination results of the four colors of the detected inner frame.

Applicant has found nothing in *Yamamoto et al.* that would teach or suggest a detector differentiating the frame image, which has gradation, of the inputted image from the detected image area by using a detection method that detects pixels by determining whether or not a pixel of interest and pixels adjacent to the pixel of interest have a same hue and a difference between lightness and saturation having a predetermined value or less, and recognizes the frame image, which has the gradation, by detecting the upper, lower, left and right ends of the frame image from the detected pixels, as recited in Claim 1.

Accordingly, Applicant submits that Claim 1 is clearly patentable over *Yamamoto et al.*, taken alone.

As discussed previously, *Murakami* relates to a sharpness processing apparatus that is used, for example, in a video plate-making process for enhancing or suppressing tone variations in the outline portions of an original image. *Murakami* discusses that the sharpness processing apparatus effects sharpness processing for a particular region of an original image having gradually changing image signals.

Murakami is not seen to remedy the deficiencies of *Yamamoto et al.* with regard to a detector differentiating the frame image, which has gradation, of the inputted image from the detected image area by using a detection method that detects pixels by determining whether or not a pixel of interest and pixels adjacent to the pixel of interest have a same hue and a difference between lightness and saturation having a predetermined value or less, and recognizes the frame image, which has the gradation, by detecting the upper, lower, left and right ends of the frame image from the detected pixels, as recited in Claim 1.

Therefore, even if *Yamamoto et al.* and *Murakami* were to be combined in the manner suggested by the Examiner, assuming such a combination would even be permissible, the result would not meet the features of Claim 1.

Accordingly, Applicant submits that Claim 1 is clearly patentable over *Yamamoto et al.* and *Murakami*, whether considered separately or in any proper combination.

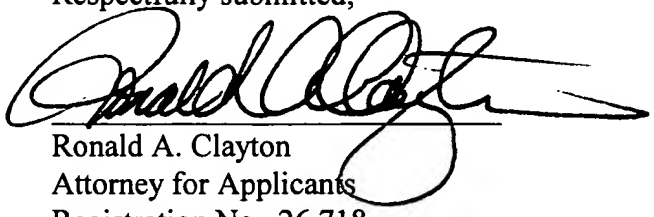
Independent Claims 9 and 17 are method and computer program product claims respectively corresponding to apparatus Claim 1, and are believed to be patentable over *Yamamoto et al.* and *Murakami* for at least the same reasons as discussed above in connection with Claim 1.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Ronald A. Clayton
Attorney for Applicants
Registration No. 26,718

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

NY_MAIN 456923v1